	Type	L #	Hits	Search T xt	DBs	Tim Stamp	Com men ts	Err or Def ini tio n	Er ro rs
1	BRS	L1	7	glycerophosphodiest er adj phosphodiesterase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:44			0
2	BRS	L2	53	regulator same (G adj protein adj signaling)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:44			0
3	BRS	L3	0	1 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0
4	BRS	L4	3	MIR16	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0
5	BRS	L5	0	2 same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/2 6 09:45			0

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FILE 'HOME' ENTERED AT 09:48:59 ON 26 MAR 2003

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 09:49:22 ON 26 MAR 2003

FILE 'CAPLUS' ENTERED AT 09:49:22 ON 26 MAR 2003
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FILE 'AGRICOLA' ENTERED AT 09:49:22 ON 26 MAR 2003

=> s glycerophosphodiester phosphodiesterase
L1          126 GLYCEROPHOSPHODIESTER PHOSPHODIESTERASE

=> s glycerophosphoryl diester phosphodiesterase
L2           52 GLYCEROPHOSPHORYL DIESTER PHOSPHODIESTERASE

=> s l1 or l2
L3          170 L1 OR L2

=> s regulator (p) (g protein signaling)
L4         1882 REGULATOR (P) (G PROTEIN SIGNALING)

=> s l1 (p) l4
L5            6 L1 (P) L4

=> duplicate remove l5
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L5
L6             3 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> d l6 1-3 ibib abs

L6   ANSWER 1 OF 3     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:   2003090411     IN-PROCESS
DOCUMENT NUMBER:    22480346   PubMed ID: 12576545
TITLE:              GDE1/MIR16 is a glycerophosphoinositol phosphodiesterase
                    regulated by stimulation of G protein-coupled receptors.
AUTHOR:             Zheng Bin; Berrie Christopher P; Corda Daniela; Farquhar
                    Marilyn G
CORPORATE SOURCE:   Department of Cellular and Molecular Medicine, University
                    of California at San Diego, La Jolla, CA 92093-0651, USA.
SOURCE:             PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE
                    UNITED STATES OF AMERICA, (2003 Feb 18) 100 (4) 1745-50.
                    Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE:         Entered STN: 20030227
                    Last Updated on STN: 20030227
AB   Previously we identified MIR16 (membrane interacting protein of RGS16) as
     an integral membrane glycoprotein that interacts with   ***regulator***
     of   ***G***     ***protein***     ***signaling***   proteins and shares
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significant sequence homology with bacterial ***glycerophosphodiester*** ***phosphodiesterases*** (GDEs), suggesting that it is a putative mammalian GDE. Here we show that MIR16 belongs to a large, evolutionarily conserved family of GDEs with a characteristic putative catalytic domain that shares a common motif (amino acids 92-116) with the catalytic domains of mammalian phosphoinositide phospholipases C. Expression of wild-type MIR16 (renamed GDE1), but not two catalytic domain mutants (E97AD99A and H112A), leads to a dramatic increase in glycerophosphoinositol phosphodiesterase (GPI-PDE) activity in HEK 293T cells. Analysis of substrate specificity shows that GDE1MIR16 selectively hydrolyzes GPI over glycerophosphocholine. The GPI-PDE activity of GDE1MIR16 expressed in HEK 293T cells can be regulated by stimulation of G protein-coupled, alpha beta-adrenergic, and lysophospholipid receptors. Membrane topology studies suggest a model in which the catalytic GDE domain faces the lumenextracellular space and the C terminus faces the cytoplasm. Our results suggest that by serving as a PDE for GPI with its activity regulated by ***G*** ***protein*** ***signaling*** , GDE1MIR16 provides a link between phosphoinositide metabolism and G protein signal transduction.

L6 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:240374 BIOSIS
DOCUMENT NUMBER: PREV200000240374
TITLE: MIR16, a putative membrane glycerophosphodiester phosphodiesterase, interacts with RGS16.
AUTHOR(S): Zheng, Bin; Chen, Dan; Farquhar, Marilyn Gist (1)
CORPORATE SOURCE: (1) Department of Cellular and Molecular Medicine, University of California San Diego, La Jolla, CA, 92093-0651 USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (April 11, 2000) Vol. 97, No. 8, pp. 3999-4004.
ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB We have identified the protein MIR16 (for Membrane Interacting protein of RGS16) from a yeast two-hybrid screen by using RGS16 as bait. MIR16 shares strong homology with bacterial glycerophosphodiester phosphodiesterases. It interacts with RGS16 and, more weakly, with several other selected RGS proteins. Analysis of deletion mutants showed that the N-terminal region of the RGS domain in RGS16 is required for its interaction with MIR16. MIR16 is an integral membrane glycoprotein, because it remained associated with membrane fractions after alkaline treatment and because, in some cells, it is sensitive to digestion with endoglycosidase H. By immunofluorescence and immunoelectron microscopy, MIR16 was localized on the plasma membrane in liver and kidney and on intracellular membranes in rat pituitary and cultured pituitary cells. MIR16 represents the only integral membrane protein identified thus far to interact with an RGS domain and, to our knowledge, is the only mammalian glycerophosphodiester phosphodiesterase that has been cloned. The putative enzymatic activity of MIR16 and its interaction with RGS16 suggest that it may play important roles in lipid metabolism and in G protein signaling.

L6 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:155792 BIOSIS
DOCUMENT NUMBER: PREV200200155792
TITLE: MIR16, a membrane glycerophosphodiester phosphodiesterase: Enzymatic activity, membrane topology and implications for membrane trafficking and signaling.
AUTHOR(S): Zheng, Bin (1); Peters, Eugenia; Williams, Chester; Ferraris, Joan; Burg, Maurice; Schmieder, Sandra (1)
CORPORATE SOURCE: (1) Department of Cellular and Molecular Medicine, University of California San Diego, 9500 Gilmar Dr., CMM-West, Rm 218, La Jolla, CA, 92093-0651 USA
SOURCE: Molecular Biology of the Cell, (Dec., 2000) Vol. 11, No. Supplement, pp. 485a. http://www.molbiolcell.org/. print.
Meeting Info.: 40th American Society for Cell Biology Annual Meeting San Francisco, CA, USA December 09-13, 2000
ISSN: 1059-1524.
DOCUMENT TYPE: Conference
LANGUAGE: English

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=> d his

     (FILE 'HOME' ENTERED AT 09:48:59 ON 26 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     09:49:22 ON 26 MAR 2003
L1           126 S GLYCEROPHOSPHODIESTER PHOSPHODIESTERASE
L2            52 S GLYCEROPHOSPHORYL DIESTER PHOSPHODIESTERASE
L3           170 S L1 OR L2
L4          1882 S REGULATOR (P) (G PROTEIN SIGNALING)
L5             6 S L1 (P) L4
L6             3 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> log y
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  28.82      29.03

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